

What is claimed is:

1. An interrupt-free interface apparatus between a modem processor and a MAP comprising:

5 a modem processor for processing data received through a wired or a wireless channel from outer side and for performing various controls according to the data receipt;

a multimedia application processor (MAP) for processing information such as voice/sound/moving picture which will be provided to a user; and

10 a dual access memory for storing an indicator and an index for identifying normal transmitting/receiving status of the data and the number of data in case that the data is written or read between the modem processor and the MAP with a predetermined period.

15 2. The apparatus of claim 1, wherein the indicator is stored in the dual access memory in order to identify whether the data is normally written or read or not, in case that the data is written or read between the modem processor and the MAP.

20 3. The apparatus of claim 1, wherein the index represents the number of data which is written or read and is stored in the dual access memory in case that the data is written or read between the modem processor and the MAP.

4. The apparatus of claim 1, wherein the respective modem  
25 processor and the MAP identify the indicator representing the normal

transmitting/receiving status of the data and the index representing the number of data with a predetermined period to decide whether the data is normally written or read or not.

5            5.        The apparatus of claim 1, wherein the dual access memory comprises:

             a data storing area for storing data transmitted/received between the modem processor and the MAP;

             an indicator storing area for storing the indicator representing storing  
10        unit/reading unit of the data; and

             an index storing area for storing the index representing the writing status/reading status of the data.

             6.        The apparatus of claim 5, wherein the data storing area comprises  
15        two areas for storing the data.

             7.        The apparatus of claim 5, wherein the indicator storing area comprises four areas for storing the data.

20            8.        The apparatus of claim 5, wherein the index storing area comprises four storing areas for storing the data.

             9.        An interrupt-free interface method between a modem processor and a MAP comprising:

25            a first step of writing or reading data on a dual access memory from a

modem processor or from a MAP after initializing the dual access memory;

a second step of deciding whether the data is normally written or read on a predetermined position of the dual access memory or not;

a third step of examining the storing area of the dual access memory in case that a predetermined time which is set in advance passed over;

a fourth step of reading the data stored in the dual access memory whenever an indicator is changed as a result of the examination; and

a fifth step of deciding whether the data is normally read or not.

10            10.        The method of claim 9, wherein the second step decides whether the data of a unit is normally stored on a predetermined position of the dual access memory or not by setting or resetting the indicator which represents the normal transmitting/receiving status of the data and by increasing the index which represents the number of data by 1.

15            11.        The method of claim 9, wherein the indicator is stored in the dual access memory in order to identify whether the data is normally written or read in case that the data is written or read between the modem processor and the MAP.

20            12.        The method of claim 9 further comprising a step of deciding whether the data is normally written or read or not by identifying the indicator representing the normal transmitting/receiving status of the data and the index representing the number of data with a predetermined period.

25            13.        The method of claim 9, wherein the fifth step decides whether the

data is normally read or not by setting or resetting the indicator representing the normal transmitting/receiving status of the data.